

1. References and Data Sources

1.1 REFERENCES

- Agency for Toxic Substances and Disease Registry (ATSDR). 2016. *Toxicological Profile for Jet A, JP-5, and JP-8 Fuels*. (Draft for Public Comment). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service. February.
- Anthony, S. S., C. D. Hunt Jr., A. M. D. Brasher, L. D. Miller, and M. S. Tomlinson, 2004. *Water Quality on the Island of Oahu, Hawaii, 1999-2001*. United States Geologic Survey.
- Baker, K., L. Hull, J. Bennett, S. Ansley, and G. Heath, 2004. *Conceptual Models of Flow through a Heterogeneous, Layered Vadose Zone under a Percolation Pond*. Idaho National Engineering and Environmental Laboratory, Environmental Monitoring Program (February).
- Department of Defense, United States (DoD). 2013. *Department of Defense Quality Systems Manual (QSM) for Environmental Laboratories*. Version 5.0. Final. Prepared by DoD Environmental Data Quality Workgroup and Department of Energy Consolidated Audit Program Operations Team. July.
- Department of Health State of Hawai'i (DOH). 1995. *Hawai'i Administrative Rules (HAR), Title 11, Chapter 451: State Contingency Plan*. Honolulu, HI. August 2, revised 1997.
- . 2000a. *Hawai'i Administrative Rules (HAR), Title 11, Chapter 281: Underground Storage Tanks (USTs)*. Solid and Hazardous Waste Branch. Amended August 2013. January 28.
- . 2000b. *Technical Guidance Manual for Underground Storage Tank Closure and Release Response*. 2nd ed. Honolulu, HI: Environmental Management Division, Solid and Hazardous Waste Branch, Underground Storage Tank Section. March.
- . 2005. *Subject: Request for No Further Action Determination for the Red Hill Oily Waste Disposal Facility*. Letter from M. K. Miyasaka, Hazard Evaluation and Emergency Response Office, to D. Ige, Naval Facilities Engineering Command, Pacific. April 11.
- . 2009. *Technical Guidance Manual for the Implementation of the Hawai'i State Contingency Plan*. Interim Final. Honolulu, HI: Office of Hazard Evaluation and Emergency Response. November 12. Updates through 2014.
- . 2011. *Evaluation of Environmental Hazards at Sites with Contaminated Soil and Groundwater, Hawai'i Edition*. Hazard Evaluation and Emergency Response Office. Fall 2011. Revised January 2012, Updated Spring 2012, Revised December 2012, Updated Fall 2014.
- Department of the Navy (DON), 1996. *Phase I Remedial Investigation Report, Red Hill Oily Waste Disposal Facility, Fleet and Industrial Supply Center*. Prepared by Ogden Environmental and Energy Services Co., Inc. for DON (January).

- 1 _____. 1999. *Initial Phase II Site Characterization Report Fleet Industrial Supply Center Bulk Fuel*
2 *Storage Facility at Red Hill*. Prepared by Ogden Environmental and Energy Services Co., Inc. for
3 NAVFAC Pacific (March).
- 4 _____. 2000. *Remedial Investigation Phase II, Red Hill Oil Waste Disposal Facility, Volume 1,*
5 *Technical Report*. Prepared by Earth Tech Inc. for NAVFAC Pacific (September).
- 6 _____. 2002. *Red Hill Bulk Storage Facility Investigation Report (Final) for Fleet Industrial Supply*
7 *Center (FISC), Oahu, Hawaii*. Prepared by AMEC Earth and Environmental, Inc. for NAVFAC
8 Pacific (August)
- 9 _____. 2003. *8,000-Gallon AST Area Total Petroleum Hydrocarbon-Diesel Characterization Report*.
10 Prepared by Earth Tech, Inc. for DON (December).
- 11 _____. 2005. *Red Hill Bulk Fuel Storage Facility Work Plan*. Prepared by The Environmental
12 Company, Inc. and AMEC Earth & Environmental, Inc. for NAVFAC Pacific (June).
- 13 _____. 2006a. *Red Hill Bulk Fuel Storage Facility Final- Work Plan Addendum*. Prepared by TEC
14 Inc. for NAVFAC Pacific (May).
- 15 _____. 2006b. *Well Abandonment Technical Memorandum, Red Hill Oily Waste Disposal Facility*.
16 Prepared by Earth Tech, Inc. for NAVFAC Pacific (August).
- 17 _____. 2007a. *Red Hill Bulk Fuel Storage Facility Draft Groundwater Field Sampling Plan*.
18 Prepared by TEC Inc. for NAVFAC Pacific (February).
- 19 _____. 2007b. *Red Hill Bulk Fuel Storage Facility Final Contingency Plan*. Prepared by TEC Inc.
20 for NAVFAC Pacific (August).
- 21 _____. 2007c. *Red Hill Bulk Fuel Storage Facility Final Technical Report*. Prepared by TEC Inc. for
22 NAVFAC Pacific (August).
- 23 _____. 2008a. *Red Hill Bulk Fuel Storage Facility Final Groundwater Protection Plan*. Prepared by
24 TEC Inc. for NAVFAC Pacific (January).
- 25 _____. 2008b. *Tank 17 Removal Action Report, Red Hill Fuel Storage Facility*. Prepared by TEC
26 Inc. for Commander, Navy Region Hawaii Environmental Department (September).
- 27 _____. 2008c. *U.S. Navy Human Health Risk Assessment Guidance*. Prepared for Naval Facilities
28 Engineering Command and Navy and Marine Corps Public Health Center by Pioneer
29 Technologies Corporation. December.
- 30 _____. 2008–2016. *Monthly Soil Vapor Monitoring Reports, Red Hill Bulk Fuel Storage Facility*.
31 Prepared for Naval Facilities Engineering Command, Hawaii, JBPHH HI.
- 32 _____. 2009a. *Work Plan Addendum Field and Data Analysis Services at the Red Hill Bulk Fuel*
33 *Storage Facility, Oahu, Hawaii*. Prepared by TEC Inc. for Fleet and Industrial Supply Center and
34 Naval Facilities Engineering Command Specialty Center (February).

- 1 _____. 2009b. *RHWW05 Boring Log*. Prepared by TEC Inc. (April).
- 2 _____. 2009c. *Revisions to the Red Hill Groundwater Protection Plan* (December).
- 3 _____. 2010a. *Type 1 Letter Report – Re-evaluation of the Tier 3 Risk Assessment/Groundwater*
4 *Model & Proposed Course of Action Red Hill Bulk Fuels Storage Facility, Pearl Harbor, HI.*
5 Prepared by TEC Inc. Prepared for Naval Fleet Engineering Service Center and Pearl Harbor
6 Naval Base Fleet Industrial Supply Center. May 4.
- 7 _____. 2010b. *Final Report, Evaluate Treatment Technologies for the Red Hill Drinking Water Well.*
8 Prepared by HDR and Hawaii Pacific Engineers for NAVFAC Hawaii (August 13).
- 9 _____. 2010c. *Final Summary Report Red Hill Fuel Storage Facility*. Prepared by TEC Inc. for
10 Commander, Navy Region Hawaii Environmental Department (August 31).
- 11 _____. 2010d. *Work Plan, Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility*. Prepared by
12 Environet, Inc. for NAVFAC Hawaii (September).
- 13 _____. 2011a. *Final Work Plan, Demolish Abandoned Tank Cleaning Water Piping and Jp-5*
14 *Pipeline and Appurtenances, Red Hill Lower Tunnel*. Prepared for DON (January).
- 15 _____. 2011b. *Quarterly Groundwater Monitoring Report*. Prepared by Environet, Inc. for DON
16 (September).
- 17 _____. 2011c. *Quarterly Groundwater Monitoring Report*. Prepared by Environet, Inc. for DON
18 (December).
- 19 _____. 2011d. *Quarterly Groundwater Monitoring Report- Outside (Non-Tunnel) Wells*. Prepared by
20 Environet, Inc. for DON (December).
- 21 _____. 2012a. *Subsurface Exploration Plan, Repair of Red Hill Tunnel*. Prepared by URS for DON
22 (January 10).
- 23 _____. 2012b. *Quarterly Groundwater Monitoring Report*. Prepared by Environet, Inc. for DON
24 (March)
- 25 _____. 2012c. *Quarterly Groundwater Monitoring Report- Outside (Non-Tunnel) Wells*. Prepared by
26 Environet, Inc. for DON (March).
- 27 _____. 2012d. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed*
28 *Underground Storage Tank 2*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency
29 Energy. (March 12).
- 30 _____. 2012e. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed*
31 *Underground Storage Tank 3*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency
32 Energy. (March 12).

- _____. 2012f. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 7*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012g. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 8*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012h. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 10*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012i. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 11*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012j. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 12*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012k. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 15*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012l. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 18*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012m. *Final 2011 Biennial Leak Detection Testing Report of Bulk Field Constructed Underground Storage Tank 20*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency Energy. (March 12).
- _____. 2012n. *DLA FY2011 SRM, Repair of Red Hill Fuel Tunnel NAVSUP Fleet Logistics Center*. Prepared by URS for DON. (March 20).
- _____. 2012o. *Quarterly groundwater Monitoring Report*. Prepared by Environet, Inc. for DON (July).
- _____. 2012p. *Quarterly Groundwater Monitoring Report- Outside (Non-Tunnel) Wells*. Prepared by Environet, Inc. for DON (July).
- _____. 2012q. *FY11SRM Repair of Red Hill Fuel Tunnel, Geotechnical Data Report*. Prepared by URS for DON (August 3).
- _____. 2012r. *Quarterly Groundwater Monitoring Report- Outside (Non-Tunnel) Wells*. Prepared by Environet, Inc. for DON (September).
- _____. 2012s. *FY11SRM Repair of Red Hill Fuel Tunnel, Geotechnical Interpretive Report*. Prepared by URS for DON (September 7).

- 1 _____. 2013a. *Final 2013 Biennial Leak Detection Testing Report of Bulk Field Constructed*
2 *Underground Storage Tank 2*. Prepared by Michael Baker Jr., Inc. for Defense Logistics Agency
3 Energy (March 13).
- 4 _____. 2013b. *FY11 SRM Repair of Red Hill Fuel Tunnel, Surface Boring Abandonment Reports*.
5 Prepared by URS Group for DON (December 20).
- 6 _____. 2014a. *Tank 5 Initial Release Response Report Red Hill Bulk Fuel Storage Facility*. Prepared
7 by Navy Region Hawaii Environmental Department (April).
- 8 _____. 2014b. *Final TAMC MW-2 Groundwater Sampling Report for Tank 05 Release Response on*
9 *April 23, 2014*. Prepared by Environmental Science International (ESI) for NAVFAC Hawaii
10 (June 27).
- 11 _____. 2014c. *Draft Work Plan/Sampling and Analysis Plan Tank 5 Area Characterization*. Prepared
12 by Parsons for NAVFAC Pacific (July).
- 13 _____. 2014d. *Final TAMC MW-2 Groundwater Sampling Report for Tank 5 Release Response on*
14 *June 23, 2014*. Prepared by ESI for NAVFAC Hawaii (July 2).
- 15 _____. 2014e. *Interim Update, Red Hill Bulk Fuel Storage Facility Final Groundwater Protection*
16 *Plan*. (August).
- 17 _____. 2014f. *Final Third Quarter 2014- Quarterly Groundwater Monitoring Report Inside Tunnel*
18 *Wells*. Prepared by ESI, Inc. for DON (September)
- 19 _____. 2014g. *Final Third Quarter 2014- Quarterly Groundwater Monitoring Report Outside*
20 *Tunnel Wells*. Prepared by ESI, Inc. for DON (September)
- 21 _____. 2014h. *Tank 5 Quarterly Release Response Report, Red Hill Bulk Fuel Storage Facility*.
22 Prepared by Commander, Navy Region Hawaii Environmental Department (November)
- 23 _____. 2015a. *Soil Vapor Sampling Report for Round 92*. Prepared by Element Environmental LLC.
24 Prepared for Naval Facilities Engineering Command, Hawaii, JBPHH HI.
- 25 _____. 2015b. *Final Project Procedures Manual, U.S. Navy Environmental Restoration Program*.
26 NAVFAC Pacific. (May)
- 27 _____. 2015c. *Final Fourth Quarter 2014- Quarterly Groundwater Monitoring Report Inside Tunnel*
28 *Wells*. Prepared by ESI, Inc. for DON (January)
- 29 _____. 2015d. *Final Fourth Quarter 2014- Quarterly Groundwater Monitoring Report Outside*
30 *Tunnel Wells*. Prepared by ESI, Inc. for DON (January)
- 31 _____. 2015e. *Tank 5 Quarterly Release Response Report, Red Hill Bulk Fuel Storage Facility*.
32 Prepared by Commander, Navy Region Hawaii Environmental Department (January)

- 1 _____ . 2015f. *Draft Monitoring Well Installation Report, Red Hill Fuel Storage Facility, Joint Base*
2 *Pearl Harbor-Hickam, Oahu, Hawaii*. Prepared by Battelle, Columbus, OH and Parsons, South
3 Jordan, UT. Prepared for Naval Facilities Engineering Command, Hawaii, JBPHH HI (March)
- 4 _____ . 2015g. *Final First Quarter 2015- Quarterly Groundwater Monitoring Report Inside Tunnel*
5 *Wells*. Prepared by Environmental Science International (ESI), Inc. for DON (March)
- 6 _____ . 2015h. *Final First Quarter 2015- Quarterly Groundwater Monitoring Report Outside Tunnel*
7 *Wells*. Prepared by Environmental Science International (ESI), Inc. for DON (March)
- 8 _____ . 2015i. *Monitoring Well Installation Report*. Prepared by Battelle and Parsons for NAVFAC
9 Pacific (March)
- 10 _____ . 2015j. *Tank 5 Quarterly Release Response Report, Red Hill Bulk Fuel Storage Facility*.
11 Prepared by Commander, Navy Region Hawaii Environmental Department (April)
- 12 _____ . 2015k. *Tank 5 Quarterly Release Response Report, Red Hill Bulk Fuel Storage Facility*.
13 Prepared by Commander, Navy Region Hawaii Environmental Department (July)
- 14 _____ . 2015l. *Final Second Quarter 2015- Quarterly Groundwater Monitoring Report Inside Tunnel*
15 *Wells*. Prepared by ESI, Inc. for DON (August)
- 16 _____ . 2015m. *Final Second Quarter 2015- Quarterly Groundwater Monitoring Report Outside*
17 *Tunnel Wells*. Prepared by ESI, Inc. for DON (August)
- 18 _____ . 2015n. *Final Third Quarter 2015- Quarterly Groundwater Monitoring Report Inside Tunnel*
19 *Wells*. Prepared by Environmental Science International, Inc. for NAVFAC Pacific (November)
- 20 _____ . 2015o. *Final Third Quarter 2015- Quarterly Groundwater Monitoring Report Outside*
21 *Tunnel Wells*. Prepared by Environmental Science International, Inc. for NAVFAC Pacific
22 (November)
- 23 _____ . 2016a. *Final Fourth Quarter 2015- Quarterly Groundwater Monitoring Report Inside Tunnel*
24 *Wells*. Prepared by Element Environmental, LLC for DON (January)
- 25 _____ . 2016b. *Final Fourth Quarter 2015- Quarterly Groundwater Monitoring Report Outside*
26 *Tunnel Wells*. Prepared by Element Environmental, LLC for DON (January)
- 27 _____ . 2016c. *Record of Categorical Exclusion, Install Monitoring Wells on Navy Property*.
28 Prepared by Lance Youn, NAVFAC Hawaii OPHE2 for Joint Base Pearl Harbor-Hickam
29 (JBPHH) (February 22)
- 30 _____ . 2016d. *Final First Quarter 2016- Quarterly Groundwater Monitoring Report Inside Tunnel*
31 *Wells*. Prepared by Element Environmental, LLC for Naval Supply Systems Command Fleet
32 Logistics Center Pearl Harbor (March)
- 33 _____ . 2016e. *Final First Quarter 2016- Quarterly Groundwater Monitoring Report Outside Tunnel*
34 *Wells*. Prepared by Element Environmental, LLC for Naval Supply Systems Command Fleet
35 Logistics Center Pearl Harbor (March)

- 1 _____. 2016f. *Draft Second Quarter 2016- Quarterly Groundwater Monitoring Report Inside Tunnel*
2 *Wells*. Prepared by Element Environmental, LLC for Naval Supply Systems Command Fleet
3 Logistics Center Pearl Harbor (June)
- 4 _____. 2016g. *Draft Second Quarter 2016- Quarterly Groundwater Monitoring Report Outside*
5 *Tunnel Wells*. Prepared by Element Environmental, LLC for Naval Supply Systems Command
6 Fleet Logistics Center Pearl Harbor (June)
- 7 _____. 2016h. *Monitoring Well Installation Work Plan, Red Hill Bulk Fuel Storage Facility*.
8 Prepared by AECOM for Defense Logistics Agency Energy (August 29)
- 9 _____. 2016i. *Final Third Quarter 2016- Quarterly Groundwater Monitoring Report Inside Tunnel*
10 *Wells*. Prepared by Element Environmental, LLC for Naval Supply Systems Command Fleet
11 Logistics Center Pearl Harbor. (October)
- 12 _____. 2016j. *Final Third Quarter 2016- Quarterly Groundwater Monitoring Report Outside Tunnel*
13 *Wells*. Prepared by Element Environmental, LLC for Naval Supply Systems Command Fleet
14 Logistics Center Pearl Harbor. (October)
- 15 _____. 2016k. *Table 3-3: Existing Borehole and Well Dimensions* (October)
- 16 Driscoll, F. G., 1986. *Groundwater and Wells, Second Edition*.
- 17 Earth Tech, 1998. *Borehole/Well Construction Log*. (June)
- 18 Engott, J. A., Johnson, A. G., Bassiouni, Maoya, and Izuka, S. K. 2015. *Spatially Distributed*
19 *Groundwater Recharge for 2010 Land Cover Estimated Using a Water-Budget Model for the*
20 *Island of O'ahu, Hawai'i: U.S. Geological Survey Scientific Investigations Report 2015-5010*.
21 <http://dx.doi.org/10.3133/sir20155010>.
- 22 Environmental Protection Agency, United States (EPA). 1989. *Risk Assessment Guidance for*
23 *Superfund, Volume I: Human Health Evaluation Manual (Part A)*. Interim Final. EPA/540/1-
24 89/002. Office of Emergency and Remedial Response. December.
- 25 _____. 1991. *Risk Assessment Guidance for Superfund, Volume I—Human Health Evaluation*
26 *Manual (Part B, Development of Risk-Based Preliminary Remediation Goals)*. Interim.
27 EPA/540/R-92/003. Office of Emergency and Remedial Response. December.
- 28 _____. 2000. *Guidance for Data Quality Assessment: Practical Methods for Data Analysis*. EPA
29 QA/G-9, QA00 Update. EPA/600/R-96/084. Office of Environmental Information. July.
- 30 _____. 2004. *Risk Assessment Guidance for Superfund: Volume I: Human Health Evaluation*
31 *Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)*. Final. OSWER No.
32 9285.7-02EP. Office of Superfund Remediation and Technology Innovation. July.
- 33 _____. 2006. *Guidance on Systematic Planning Using the Data Quality Objectives Process*. EPA
34 QA/G-4. EPA/240/B-06/001. Office of Environmental Information. February.

- 1 ———. 2009. *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation*
- 2 *Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment)*. EPA-540-R-070-002.
- 3 OSWER 9285.7-82. Office of Superfund Remediation and Technology Innovation. January.
- 4 El-Kadi, A. I., and J. E. T. Moncur, 2006. *The History of Groundwater Management and Research in*
- 5 *Hawaii*. Water Resources Research Center, University of Hawaii.
- 6 Environmental Protection Agency, United States, Region 9; and the State of Hawai'i Department of
- 7 Health (EPA Region 9 and DOH). 2015. *Administrative Order on Consent In the Matter of Red*
- 8 *Hill Bulk Fuel Storage Facility*. EPA Docket No: RCRA 7003-R9-2015-01; DOH Docket No: 15-
- 9 UST-EA-01. September.
- 10 Existing groundwater model data (Excel document entitled model_well data_water levels_pumping
- 11 rates.xlsx)
- 12 Faybishenko, B., C. Doughty, M. Steiger, J. C. S. Long, T. Wood, J. Jacobsen, J. Lore, and P. T.
- 13 Zawislanski, 1999. *Conceptual Model of the Geometry and Physics of Water Flow in a Fractured*
- 14 *Basalt Vadose Zone: Box Canyon Site, Idaho*. Ernest Orlando Lawrence Berkeley National
- 15 Laboratory, Earth Science Division (March)
- 16 Faybishenko, B., P. A. Witherspoon, C. Doughty, J. T. Geller, T. R. Wood, and R. K. Podgorney,
- 17 2001. *Multi-Scale Investigations of Liquid Flow in a Fractured Basalt Vadose Zone*. Lawrence
- 18 Berkeley National Laboratory; Parsons Infrastructure and Technologies, Inc.; and Idaho National
- 19 Engineering and Environmental Laboratory
- 20 Federal Facilities Assessment Branch, 2005. *Public Health Assessment for Pearl Harbor Naval*
- 21 *Complex, Pearl Harbor, Hawaii*. U. S. Department of Health and Human Services Public Health
- 22 Service, Agency for Toxic Substances and Disease Registry (December 28)
- 23 Frans, L. M., M. G. Rupert, C. D. Hunt Jr., and K. D. Skinner, 2012. *Groundwater Quality in the*
- 24 *Columbia Plateau, Snake River Plain, and Oahu Basaltic-Rock and Basin-Fill Aquifers in the*
- 25 *Northwestern United States and Hawaii, 1992-2010*. Scientific Investigations Report 2012-5123.
- 26 United States Geologic Survey
- 27 Giambelluca, T. W., 1983. *Water Balance of the Pearl Harbor-Honolulu Basin, Hawaii, 1946-1975*.
- 28 Water Resources Research Center, University of Hawaii at Manoa.
- 29 Gingerich, S. B., and D. S. Oki, 2000. *Ground Water in Hawaii*. United States Geologic Survey.
- 30 Hawaiian Department of Land and Natural Resources, 2016. *Halawa Deep Monitor Well, Oahu (3-*
- 31 *2253-003)* (May)
- 32 Hawaii Well Index 2014
- 33 higp.hawaii.edu
- 34 Hirashima, G. T. 1962. *Effect of the Haiku Tunnel on Kahaluu Stream, Oahu, Hawaii*. U.S.
- 35 Geological Survey Professional Paper 450-C.

- 1 *Historical Data of Tank Releases*
- 2 Honolulu Board of Water Supply, 1960. *The Water Sources of Oahu.*
- 3 <http://catalog.data.gov/viewer?url=http%3A%2F%2Fservices.azgs.az.gov%2FArcGIS%2Fservices%2Faasggeo%2FHIWellLogs%2FMapServer%2FWMS%2Frequest%3DGetCapabilities%26service%3DWMS&serviceType=WMS>
- 4
- 5
- 6 <http://hi.water.usgs.gov/data/adrweb/2005/gw/>
- 7 <http://www.higp.hawaii.edu/csav/WaterWells/Oahu/>
- 8 <http://www.higp.hawaii.edu/hggrc/projects/hawaii-state-waterwells>
- 9 Hufen, T. H. 1980. *Underground Residence Times and Chemical Quality of Basal Groundwater in*
- 10 *Pearl Harbor and Honolulu Aquifere, O'ahu, Hawai'i.* Water Resources Research Center,
- 11 University of Hawaii at Manoa.
- 12 Hunt, C. D., Jr. 1996. *Geohydrology of the Island of Oahu, Hawaii: Regional Aquifer System*
- 13 *Analysis – Oahu, Hawaii.* U.S. Geological Survey Professional Paper 1412-B.
- 14 Izuka, S. K., 1992. *Geology and Stream Infiltration of North Halawa Valley, Oahu, Hawaii.* U.S.
- 15 Geological Survey Water-Resources Investigations Report 91-4197. Prepared in cooperation with
- 16 the State of Hawaii Department of Transportation.
- 17 Izuka, S. K., Engott, J. A., Bassiouni, Maoya, Jonson, A. G., Miller, L. D., Rotzoll, Kolja, and Mair,
- 18 Alan, 2016. *Volcanic Aquifers of Hawai'i- Hydrogeology, Water Budgets, and Conceptual*
- 19 *Models.* U. S. Geological Survey Scientific Investigations Report 2015-5164.
- 20 <http://dx.doi.org/10.3133/sir20155164>.
- 21 Klasner, F. L. and C. D. Mikami, 2003. *Land Use of the Island of Oahu, Hawaii, 1998.* U. S.
- 22 Geological Survey Water-Resources Investigations Report 02-4301.
- 23 Langenheim, V. M., and D. A. Clague. 1987. The Hawaiian-Emperor Volcanic Chain, Part II,
- 24 Stratigraphic Framework of Volcanic Rocks of the Hawaiian Islands, Chap. 1 in: *Volcanism in*
- 25 *Hawaii*, eds. R. W. Decker, T. L. Wright, and P. H. Stauffer. U.S. Geological Survey Professional
- 26 Paper 1350, v. 1, pp. 55–84.
- 27 MacDonald, G. A., A. T. Abbott, and F. L. Peterson. 1983. *Volcanoes in the Sea: The Geology of*
- 28 *Hawaii.* 2nd ed. Honolulu, HI: Univ. of Hawaii Press.
- 29 MacDonald, G. A., and D. A. Davis. 1956 Zone des Hawaii. Chapter 2 in: J. Avias et al., *Oceanie*
- 30 *proprement dite*; Fasc. 2 of V.6, Oceanie. Lexique Stratigraphique International Editions du
- 31 centre national de la recherche scientifique.
- 32 Miller, J. A. 1999. *Ground Water Atlas of the United States: Introduction and National Summary.*
- 33 U.S. Geological Survey.

- 1 Miller, J. A., R. L. Whitehead, S. B. Gingerich, D. S. Oki, and P. G. Olcott. 1999. *Ground Water*
2 *Atlas of the United States: Segment 13, Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands.*
3 U.S. Geological Survey.
- 4 Mink, J. F. 1980. *State of the Groundwater Resources of Southern Oahu.* Board of Water Supply,
5 City and County of Honolulu.
- 6 Mink, J. F., and L. S. Lau. 1990. *Aquifer Identification and Classification for O'ahu: Groundwater*
7 *Protection Strategy for Hawai'i.* Technical Report No. 179. Honolulu, HI: Univ. of Hawai'i,
8 Water Resources Research Center (February)
- 9 Munro, K. 1981. *The Subsurface Geology of Pearl Harbor with Engineering Application.* Master of
10 Science in Geology and Geophysics Thesis (August)
- 11 Nichols, W. D., P. J. Shade, and C. D. Hunt, Jr. 1996. *Summary of the Oahu, Hawaii, Regional*
12 *Aquifer-System Analysis.* U.S. Geological Survey Professional Paper 1412-A. Denver, CO.
- 13 Pacific Naval Air Bases. 1941. *Logs of Formations in Tank Excavation.*
- 14 Occupational Safety and Health Administration (OSHA). 2004. *Kerosene.* OSHA Sampling and
15 Analytical Method PV2139 (September)
- 16 Oki, D. S., 1998. *Geohydrology of the Central Oahu, Hawaii, Ground-Water Flow System and*
17 *Numerical Simulation of the Effects of Additional Pumping.* U. S. Geological Survey Water-
18 Resources Investigations Report 97-4276. Prepared in cooperation with the Honolulu Board of
19 Water Supply.
- 20 _____. 2005. *Numerical Simulation of the Effects of Low-Permeability Valley-Fill Barriers and the*
21 *Redistribution of Ground-Water Withdrawals in the Pearl Harbor Area, Oahu, Hawaii.* U.S.
22 Geological Survey, Science Investigations Report 2005-5253.
- 23 Oki, D. S., S. B. Gingerich, and R. L. Whitehead. 1999. Hawaii. In: *Ground Water Atlas of the*
24 *United States, Segment 13: Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands.* HA 730-N.
25 U.S. Geological Survey.
- 26 Presley, T. K., J. M. Sinton, and M. Pringle. 1997. Postshield Volcanism and Catastrophic Mass
27 Wasting of the Waianae Volcano, Oahu, Hawaii. *Bulletin of Volcanology* 58:597–616.
- 28 Red Hill Fuel Storage Facility Task Force, State of Hawai'i (RHSF Task Force). 2014. *Report to the*
29 *Twenty-Eighth Legislature, State of Hawaii, 2015, Pursuant To Senate Concurrent Resolution 73*
30 *Requesting the Department of Health to Convene a Task Force to Study the Effects of the January*
31 *2014 Fuel Tank Leak at the Red Hill Fuel Storage Facility* (December)
- 32 Rotzoll, K, 2012. *Numerical Simulation of Flow in Deep Open Boreholes in a Coastal Freshwater*
33 *Lens, Pearl Harbor Aquifer, O'ahu, Hawai'i.* Scientific Investigations Report 2012-5009.
34 Prepared in cooperation with the Honolulu Board of Water Supply.

- 1 Rotzoll, K., A. I. El-Kadi, and S. B. Gingerich. 2007. Estimating Hydraulic Properties of Volcanic
2 Aquifers using Constant-Rate and Variable-Rate Aquifer Tests. *Journal of the American Water*
3 *Resources Association* 43(2): 334–345.
- 4 Rotzoll, K., D. S. Oki, and A. I. El-Kadi, 2010. *Changes of Freshwater-Lens Thickness in Basaltic*
5 *Island Aquifers Overlain by Thick Coastal Sediments*. Water Resources Research Center,
6 University of Hawaii; and U. S. Geological Survey, Pacific Islands, Water Science Center.
7 Published in *Hydrogeology Journal* (April)
- 8 Rowland, S. K., and M. O. Garcia. 2004. *Southeast O'ahu Geology Field Trip Guide*. Univ. of
9 Hawaii, School of Ocean and Earth Science and Technology, Hawaii Institute of Geophysics &
10 Planetology.
- 11 Shade, P. J., and W. D. Nichols. 1996. *Water Budget and the Effects of Land-Use Changes on*
12 *Ground-Water Recharge, Oahu, Hawaii*. U.S. Geological Survey Professional Paper 1412-C.
- 13 Sherrod, D. R., J. M. Sinton, S. E. Watkins, and K. M. Brunt. 2007. *Geologic Map of the State of*
14 *Hawai'i*. U.S. Geological Survey Open-File Report 2007-1089.
- 15 Soroos, R. L., and C. J. Ewart. 1979. *Ground-Water Status Report, Pearl Harbor Area, Hawaii,*
16 *1978*. Department of the Interior, United States Geological Survey. Prepared in cooperation with
17 the Hawaii State Department of Land and Natural Resources Division of Water and
18 Development.
- 19 Souza, W. R., and C. I. Voss. 1987. Analysis of an Anisotropic Coastal Aquifer System using
20 Variable-Density Flow and Solute Transport Simulation. *Journal of Hydrology* 92:17–41.
- 21 State of Hawaii Department of Transportation, 1988. *Plans for Construction of a Portion of*
22 *Interstate Route H-3, Halawa Quarry Viaduct Makai Section*. (August)
- 23 Stearns, H. T. 1939. *Geologic Map and Guide of the Island of Oahu, Hawaii*. Hawaii (Terr.)
24 Division of Hydrography Bulletin 2. Prepared in cooperation with the Geological Survey, U.S.
25 Department of the Interior (August)
- 26 Stearns, H. T. 1940. *Supplement to the Geology and Ground-Water Resources of the Island of Oahu,*
27 *Hawaii*. Hawaii (Terr.) Division of Hydrography Bulletin 5.
- 28 ———. 1946. *Geology of the Hawaiian Islands*. Hawaii (Terr.) Division of Hydrography Bulletin 8.
29 Prepared in cooperation with the Geological Survey, U.S. Department of the Interior.
- 30 Stearns, H. T., and K. N. Vaksvik. 1935. *Geology and Ground-Water Resources of the Island of*
31 *Oahu, Hawaii*. Hawaii (Terr.) Division of Hydrography Bulletin 1. Prepared in cooperation with
32 the U.S. Geological Survey.
- 33 ———. 1938. *Records of the Drilled Wells on Oahu, Hawaii*. Hawaii (Terr.) Division of
34 Hydrography Bulletin 4. Prepared in cooperation with the Geological Survey, U.S. Department of
35 the Interior.

- 1 Takasaki, K. J. 1971. *Ground Water in the Waianae District, Oahu, Hawaii*. Report 358. Hydrologic
2 Atlas. USGS Publications Warehouse.
- 3 Takasaki, K. J., and J. F. Mink. 1982. *Water Resources of Southeastern Oahu, Hawaii*. U.S.
4 Geological Survey, Water-Resource Investigations 82-628. Open-File Report. USGS Publications
5 Warehouse.
- 6 ———. 1985. *Evaluation of Major Dike-Impounded Ground-Water Reservoirs, Island of Oahu*. U.S.
7 Geological Survey, Water-Supply Paper 2217. Prepared in cooperation with the Board of Water
8 Supply, City and County of Honolulu.
- 9 Takasaki, K. J., and S. Valenciano. 1969. *Water in the Kahuku Area, Oahu, Hawaii*. Geological
10 Survey Water-Supply Paper 1874. Prepared in cooperation with the State of Hawaii, Department
11 of Land and Natural Resources, Division of Water and Land Development.
- 12 TEC Inc., 2009. *Red Hill Bulk Fuel Storage Facility, LTM 2009*. (April)
- 13 ———. 2010. *Type 1 Letter Report- Re-evaluation of the Tier 3 Risk Assessment/Groundwater*
14 *Model & Proposed Course of Action, Red Hill Bulk Fuels Storage Facility, Pearl Harbor, HI*.
15 (May)
- 16 URS Group, 2000. *Halawa Deep Monitoring Well Log*.
- 17 ———. 2006. *Final Summary of Drilling and Hydrogeologic Conditions for Waimalu deep Monitor*
18 *Well No. 2456-05*. (January 4).
- 19 ———. 2013. *FY11 SRM Repair of Red Hill Fuel Tunnel-Surface Boring Abandonment Reports*.
20 (December)
- 21 Visher, F. N. and J. F. Mink. 1964. *Ground-Water Resources in Southern Oahu, Hawaii*. Geological
22 Survey Water-Supply Paper 1778. Prepared in cooperation with the State of Hawaii, Department
23 of Land and Natural Resources, Division of Water and Land Development.
- 24 Walker, G. P. L. 1990. Geology and Volcanology of the Hawaiian Islands. *Pacific Science* 44(4):
25 315–347. Univ. of Hawai'i Press.
- 26 Water Resources International, Inc., 2000. *Well Completion Report* (May 30)
- 27 Wentworth, C. K. 1938. *Geology and Ground Water Resources of the Palolo-Waialae District,*
28 *Honolulu, Hawaii*. Honolulu: Board of Water Supply.
- 29 ———. 1942. *Geology and Groundwater Resources of the Moanahua-Halawa District*. Honolulu:
30 Board of Water Supply.
- 31 ———. 1945. *Geology and Groundwater Resources of the Pearl Harbor District*. Honolulu: Board
32 of Water Supply.
- 33 ———. 1951. *Geology and Groundwater Resources of the Honolulu-Pearl Harbor Area, Oahu,*
34 *Hawaii*. Honolulu: Board of Water Supply.

- 1 Wentworth, C. T. 1953. Geology and Hydrology Relating to the Hausten Spring and Fishpond.
2 Honolulu, HI. December 3. Unpublished report reproduced in appendix of: J. E. Wolfe (1975),
3 *Map location and dimensional definition of sub- surface caverns*, Senior Honors thesis, Univ. of
4 Hawai'i Department of Geology and Geophysics.
- 5 Whitehead, R. L. 1992. *Geohydrologic Framework of the Snake River Plain Regional Aquifer*
6 *System, Idaho and Eastern Oregon*. U.S. Geological Survey Professional Paper 1408-B.
- 7 Whittier, R. B., K. Rotzoll, S. Dhal, A. I. El-Kadi, C. Ray, and D. Chang, 2010. *Groundwater Source*
8 *Assessment Program for the State of Hawaii, USA: Methodology and Example Application*.
9 Department of Geology & Geophysics and Water Resources Research Center, University of
10 Hawaii; Department of Civil Engineering, University of Hawaii; and State of Hawaii Department
11 of Health, Safe Drinking Water Branch. Published in *Hydrogeology Journal*